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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/002,908	11/13/2001	Shohei Suzuki	4641-60729	5068

7590 10/01/2003

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[REDACTED] EXAMINER

EL SHAMMAA, MARY A

[REDACTED] ART UNIT

[REDACTED] PAPER NUMBER

2881

DATE MAILED: 10/01/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	Application No.	Applicant(s)	
	10/002,908	SUZUKI ET AL.	
	Examiner	Art Unit	
	Mary A. El-Shammaa	2881	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### **Office Action Summary**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(e). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified below is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- The reply time limit set in this communication is an absolute deadline. Any extension of time will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, after mailing, cause the application to become **ABANDONED**. (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

1)  Responsive to communication(s) filed on \_\_\_\_\_.  
2a)  This action is FINAL.                            2b)  This action is non-final.  
3)  Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

4)  Claim(s) 1-65 is/are pending in the application.  
4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.

5)  Claim(s) \_\_\_\_\_ is/are allowed.

6)  Claim(s) 1-65 is/are rejected.

7)  Claim(s) 61 and 64 is/are objected to.

8)  Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

9)  The specification is objected to by the Examiner.

10)  The drawing(s) filed on 13 November 2001 is/are: a)  accepted or b)  objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

11)  The proposed drawing correction filed on \_\_\_\_\_ is: a)  approved b)  disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.

12)  The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

13)  Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)  All b)  Some \* c)  None of:

1.  Certified copies of the priority documents have been received.

2.  Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.

3.  Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

14)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).

a)  The translation of the foreign language provisional application has been received.

15)  Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

**Attachment(s)**

1)  Notice of References Cited (PTO-892)  
2)  Notice of Draftsperson's Patent Drawing Review (PTO-948)  
3)  Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_  
4)  Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_  
5)  Notice of Informal Patent Application (PTO-152)  
6)  Other: \_\_\_\_\_

### **DETAILED ACTION**

#### ***Drawings***

The drawings are objected to as failing to comply with 37 CFR 1.84(p)(5) because they include the following reference sign(s) not mentioned in the description: 4 and 6. A proposed drawing correction, corrected drawings, or amendment to the specification to add the reference sign(s) in the description, are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

#### ***Claim Objections***

Applicant is advised that should claims 60 and 63 be found allowable, claims 61 and 64 will be objected to under 37 CFR 1.75 as being a substantial duplicate thereof. When two claims in an application are duplicates or else are so close in content that they both cover the same thing, despite a slight difference in wording, it is proper after allowing one claim to object to the other as being a substantial duplicate of the allowed claim. See MPEP § 706.03(k).

#### ***Double Patenting***

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and, *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground

provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1 - 65 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-2, 7-8, and 17-18 of copending Application No. 10/131805 ("805"). Although the conflicting claims are not identical, they are not patentably distinct from each other because these claims encompass the same features as one another and represent the same invention.

This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

With respect to claims 1-7, 12-15, and 30-46, claim 18 of the "805" application discloses a method for magnetically shielding a charged-particle-beam optical system comprising disposing an active-canceler coil set that produces a respective magnetic field of a desired direction and magnitude effective for canceling at least a portion of an external magnetic field or a magnetic flux. Although the "805" reference does not specifically teach not obstructing the trajectory of the charged particle beam and electrically energizing the coil, it would have been obvious to one having ordinary skill in the art to not obstruct the trajectory of the beam as well as to energize the coil, because obstructing the beam would interfere with the beam path, and it is necessary to energize the coil in order for the coil to produce a magnetic field, otherwise the coil would be ineffective.

With respect to claims 8-11, claim 17 of the "805" application discloses a method for magnetically shielding a charged-particle-beam optical system comprising disposing an active-canceler coil set that produces a respective magnetic field of a desired direction and magnitude effective for canceling at least a portion of an external magnetic field or a magnetic flux as well as disposing an external magnetic shield being made of an anisotropic material. Although the "805" reference does not specifically teach not obstructing the trajectory of the charged particle beam and electrically energizing the coil, it would have been obvious to one having ordinary skill in the art to not obstruct the trajectory of the beam as well as to energize the coil, because obstructing the beam would interfere with the beam path, and it is necessary to energize the coil in order for the coil to produce a magnetic field, otherwise the coil would be ineffective.

With respect to claims 16-18, 21-29, and 47-65, claims 7 and 8 of the "805" application discloses a charged-particle-beam optical system comprising disposing a device for reducing, by cancellation, a magnetic field external to the column that otherwise would extend to inside the column, so as to magnetically shield the CPB optical system from the external magnetic field, the device comprising an active-canceler coil set situated at a position relative to the column, the coil set comprising at least one electrically energizable coil that, when electrically energized, produces a respective magnetic field of a direction and magnitude sufficient for canceling at least a portion of the external magnetic field. Although the "805" reference does not specifically teach not obstructing the trajectory of the charged particle beam, it would have been obvious to one having ordinary skill in the art to not obstruct the trajectory of the beam because obstructing the beam would interfere with the beam path.

With respect to claims 19-20 and 28, claims 1 and 2 of the "805" application discloses a charged-particle-beam optical system comprising disposing a device for reducing, by cancellation, a magnetic field external to the column that otherwise would extend to inside the column, so as to magnetically shield the CPB optical system from the external magnetic field, the device comprising an active-canceler coil set situated at a position relative to the column, the coil set comprising at least one electrically energizable coil that, when electrically energized, produces a respective magnetic field of a direction and magnitude sufficient for canceling at least a portion of the external magnetic field, and a magnetic shield, made of an anisotropic magnetic material, situated outside of the column. Although the "805" reference does not specifically teach not obstructing the trajectory of the charged particle beam, it would have been obvious to one having ordinary skill in the art to not obstruct the trajectory of the beam because obstructing the beam would interfere with the beam path.

#### *Conclusion*

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mary A. El-Shammaa whose telephone number is 703.308.0851. The examiner can normally be reached on M-F (8:30am-5:00pm).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, John R. Lee can be reached on 703.308.4116. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703.872.9317.

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Art Unit: 2881

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**MAE**  
September 10, 2003



A handwritten signature in black ink, appearing to read "MAE".

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